

America and Japan: Influences and Impacts of Westernization on Japanese
Architecture

An Honors Thesis (HONRS 499)

by

Mark Figgins

Thesis Advisor
Michele Chiuini

A handwritten signature in black ink, appearing to read 'Michele Chiuini', with a large initial 'M' and a stylized 'C'.

Ball State University
Muncie, Indiana

May 2011

Expected Date of Graduation

May 2011

Abstract

Traditional Japanese architecture is among the finest in the world. Japan's isolation allowed its traditions and customs to be refined over centuries, whereas the origins of American architecture reside in European styling. When Commodore Matthew Perry sailed into Tokyo Bay in 1853, he opened Japan up to an influx of Western culture that transformed it into a modern nation. Japan's struggle to find a modern identity and to reconcile Western and traditional architecture is examined from 1853 to the present.

Acknowledgments

I would like to thank Professor Michele Chiuini for advising me. His knowledge and patience have helped me immensely throughout this project.

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Japan has a rich history of tradition and culture. It is highly modernized, yet throughout its landscape, glimpses of a time centuries ago can still be seen. Its traditional architecture, simple, but with great attention to detail and beauty, is among the most fascinating in the world. When American Commodore Perry opened up Japan to an influx of Western culture, it sparked a desire to industrialize and use Western technology to further its goals. Prior to World War II, Japan abandoned many of its traditional architectural practices in favor of Western styles. After the war, a new vernacular was established, blending the old with the new. Japan's impact on our history has been great, but does not compare to the impact that America has had on its recent history.

Influences on Traditional Japanese Architecture

The earliest known culture to inhabit the Japanese islands was the Jomon people. They primarily built pit dwellings, which were holes dug into the ground covered with wooden post and lintel frames. Following the Jomon were the Yayoi people, whose architecture forms the historical base for traditional Japanese architecture. Yayoi dwellings had raised floors, supported by wooden piles, as well as roofs consisting of a ridge beam supporting rafters. One distinguished feature that can still be seen in traditional Japanese architecture is the extension of the rafters beyond the height of the ridge beam. Yayoi dwellings were located in lower midlands, which were better suited to crop irrigation and cultivation than the hillside locations of Jomon dwellings.

Religion and spirituality play a major role in the traditional architecture of Japan. Shinto, Japan's native form of spirituality, is closely tied to nature and natural phenomena. Spirits, or *kami*, reside in nature, and the most sacred of places are where *kami* are thought to live. According to William Alex, "a vague mythology mixing with an inchoate pantheism had gradually become organized into Shinto—'the way of the gods'—and natural sites with an air of grandeur or mystery about them, obviously where the gods would be, became places of early Shinto worship. These were places of adoration and identification, not of fear, for in Shinto the universe and all existence, including man, were related and therefore partook of divinity" (Alex 17). Eventually, shrines were built on some of these places of worship. Shinto shrines consist of a series of concentric spaces enclosed by fences. Spaces become more sacred as they near the center, with the most center point being where the *kami* resides. The term *ma* refers to physical spatial distance, but also the gap between the physical and the spiritual. Space becomes the most important aspect of a shrine, as it relates to the spiritual state of the mind.

The holiest shrines in Japan are the Ise Shrines. The originals were built in the third and fourth centuries, and have been torn down and rebuilt every twenty years, symbolizing the process of death and rebirth. There are two precincts: one, Naigu, or the inner shrine, is dedicated to the Sun Goddess Amaterasu-o-mi-kami, and the other, Geku, or the outer shrine, is dedicated to the Goddess of Cereals, Toyo-uke-bime-no-kami. Both precincts face south and

are arranged with an eye towards symmetry. In describing the features, Alexander Soper writes:

The design is dominated by the heavy thatched gable. Elongation (the Naigu hall is three bays by two, nearly 37 feet by 18) produces a dramatic stress on horizontals: at the top the rich cresting of ridge billets, then the deep, slanting reveal of thatch at the eaves, then the balcony rail and floor. The suavity of Chinese curves is completely lacking; instead, to avoid an overbalance, the thatch narrows as it rises. At each end the gable projects well beyond the wall. The overhanging ridge-pole is supported by a free-standing pillar, which also tapers noticeably as it rises from the ground, through the balcony. Pillars, floor- and wall-boards, and billets have a fine solidity. The chigi, formed by the ends of the bargeboards, are curiously cut out, as if to reduce wind resistance. From each bargeboard, on either side of the projecting ridge-pole, there emerges a row of very long, close-set pegs, square with rounded ends. (Paine and Soper 285)

Another feature that remains distinctly Shinto is the ceremonial gateway, or *torii*. Its construction is very simple, two posts supporting a wide beam, with a shorter beam just below, but it has a great visual impact that is solely Japanese.

The teachings of Buddha slowly began to enter Japan through Chinese and Korean influences in the late sixth and early seventh century. The first examples of Japanese Buddhist temples were borrowed architecture; they

followed the style seen on mainland China and Korea. The Horyuji Temple, founded in 607, shows the first departure from mainland Buddhist architecture. Commonly, temple buildings were arranged along a south-to-north axis as follows: the outer south gate, the inner gate, the pagoda and “Buddha” hall, and the lecture hall at the northernmost end. Any other buildings were placed along the north axis. The Horyuji Temple defies this arrangement by placing its main structures on either side of the axis, “providing early evidence of a change in religious preference and, possibly, of the Japanese taste for asymmetry” (Alex 21).

The Todaiji Monastery, founded in 745, marks the adoption of Buddhism as a state religion by the Imperial House. It was the largest in Japan, even larger than any in China, consisting of a two-mile enclosure. The monastery’s Hall of the Great Buddha is the largest wooden building in the world under one roof, and also contains the largest bronze statue in the world, a 53½ foot tall seated Buddha (Alex 22).

During the Kamakura Period (1186-1335), there were three main styles of Buddhist temple architecture. Tenjikuyo was used by the priest Chogen, who based his construction methods on those used by the Sung Chinese. Wayo was a continuation of cult Buddhist styles from the previous Heian Period, and Karayo was an importation of Zen Buddhist architecture, which followed strict symmetry around a central axis. Both the Wayo and Karayo styles would eventually merge and form a basis for all later temple designs.

With the advent of military feudalism in Japan, a particular cult of Buddhism, called Zen, became popular. Zen Buddhism differed from mainstream Buddhist thought, and its tenets included simplicity, restraint, and the elimination of the insignificant. These ideas fit well with the doctrines of the military, who were bound by discipline and a great sense of honor. From Zen Buddhism come formative elements of a common Japanese domestic architecture, including gardens and tea houses. The traditional Japanese dwelling derives many features from the Zen chapel house, like the *tokonoma*, *shoin*, and *tana*. The *tokonoma* originated as a private altar in a priest's home, where items such as an incense burner, votive candles, and flower arrangements were placed on a wooden table in front of a Buddhist scroll painting. This eventually evolved into a recessed alcove, and it became used for the display of paintings and other art in a more secular setting. The *shoin* was a desk alcove with a window devoted to study. This later became the main guest room and status symbol of a typical dwelling. Originally, *tana* were freestanding shelves for the storage of scrolls and other objects, but they became built in wall storage, either open or covered with sliding doors (Alex 30-31).

The Japanese Home

What Westerners typically think of as the traditional Japanese house is of the Shoin style, referring to the use of *tokonama*, *shoin*, and *tana* in the central room of a home. This room, called *odanoma*, was usually raised above the main floor on a platform called a *jodan*, emphasizing its importance. "By the sixteenth

century, its conventional use of structure, materials, and room arrangement in plan (or more properly speaking, the principles of plan) was generally typical of the most extensive palace as well as of the smallest tea house; the same use persists today" (Alex 32). The construction is of wood, the primary building material since Japan's architecture first began, and consists of a post and beam system that rests on foundation stones without any attachment. This elevates the whole structure a foot or two above the ground, preventing moisture from seeping into the ends of the columns, as well as allowing the structure to move in the event of an earthquake. The roof framing uses cross-beams that rest on the upright posts, and in turn, support the rafters. The roof must support the heavy weight of tile or wet thatch, but the skills of Japanese carpenters make these structures exceptionally strong. The eaves created by the rafters allow winter sun into the interior while excluding hotter summer rays and rainfall.

A unique aspect of Japanese dwellings is the versatile use of interior space. Western interiors are separated by permanent walls, but the Japanese use movable partitions to change the nature of spaces. These partitions are known as *fusuma*, and are made of thin wood lathe on which rice paper is glued to diffuse light into the space. Permanent exterior walls are usually lath and plaster, with the exterior surface usually strips of wood, bark, or plaster. Sliding partitions on the exterior are called *shoji* and serve as doorways. The paper faces of both *fusuma* and *shoji* are often decorated, and can be great works of art in their own right (Morse 127).

While many cultures associate the floor with dirt, the Japanese treat it with as much importance as any other defining plane in a space. It is a common surface for activity, and exhibits the qualities of warmth and texture. *Tatami*, woven floor mats, are usually around six feet by three, provide texture and comfort to someone sitting. Decoration, placement of objects, and exterior views are all constructed to be considered at the eye level of a seated person. *Fusuma* and *shoji* are about the same height as the *tatami* is long, and end at a strip of molding called *nageshi*, which continues around the room and provides a scale reference, no matter how large the room is. All household items are removed from the floor when not in use, enabling other functions. As William Alex describes:

Room functions are completely interchangeable and at any time a series of small rooms can, with removal of *fusuma*, become one large room. Lacking high or overbearing furniture, spaces are clear, defined only by textured planes whose materials manifest their own natural personality; *tatami* in lustrous tones of yellowish green, papered sliding screens, occasional solid walls of plaster, richly polished woods, and, when *shoji* are removed, a garden view. The *tokonama*, found in almost every Japanese house, is the focal point of the interior, the place devoted solely and exclusively to the display of art—scroll paintings, flower arrangements, ceramic objects—changed with the seasons, the mood of the inhabitant, or any special occasion (Alex 33-34).

Gardens are as much a part of Japanese tradition as any built structure.

Influences from Shinto, Zen Buddhism, and Korean and Chinese precedents all contribute to the art of Japanese gardens. Early gardens had religious significance, either to Shinto or Buddhism. However, the high point of garden design stems from the serenity of Zen Buddhism. These followed three basic types: pond gardens, dry landscape gardens, where water was implied, and flat gardens, seen in Zen Buddhist temples. No matter the type, all these gardens were a deliberate blend of trees, rocks, shrubs, moss, and sand (Alex 38). Even the smallest plots of land were carefully crafted into works of great beauty and simplicity. Daisenin Garden is considered to be one of the greatest works of Japanese garden art. Created in 1509 as part of the Daitokuji Temple in Kyoto, Daisenin is a small garden laid out in the shape of a carpenter's square. It is a dry landscape garden, with sand carefully raked around particular rocks, imitating a stream through a cascade of mountains. Daisenin, and others like it, were places of meditation and contemplation, where association with nature was akin to spirituality.

Another Zen aspect relating to Japanese architecture is Chanoyu, the tea ceremony. Originally practiced in a special room in the house, the tea ceremony eventually received its own building, the *chashitsu*, or tea house. The *chashitsu* is accessed through a small garden, which represents a break in the connection to the outside world. Guests enter through a small entrance that imparts humility, and are met with a bare interior that derives character only from the materials used in its construction. "Absent are balance and symmetry, with their resulting

sense of completeness which, according to Chanoyu, inhibits the imagination and allows for no further growth. Suggestive presences and tacit absences are translated into an atmosphere of austere tranquility, the felicitous setting for the Zen 'art of being in the world'" (Alex 41-42). It is clear that these kinds of religious influences had a major impact on all areas of traditional Japanese architecture.

Early American Architecture

While Japan had many centuries to develop and refine its unique architecture, the Americans who would arrive from the east in 1853 had a very different architectural background. Colonies from Spain, England, Sweden, Holland, and France were established along the east coast and southwest of North America. Some sought to expand an empire, while others sought freedom from religious persecution. All brought with them architectural influences from their native countries. Spain had been in the New World longer than the others, and its settlements in present-day Florida, New Mexico, Texas, and California reflected an established empire. Missions were erected all over Spanish territory to bring the grace of God to the natives, and these were reminiscent of the Spanish Baroque style. They used primarily local materials, like adobe in the Southwest and timber and stone in Florida. They were detailed and ornamented, reflecting a sound flow of supplies and funds.

Early settlements of the English, Dutch, and Swedes were founded primarily out of a desire to escape persecution or economic troubles in their homeland. The shelters built upon arrival were very crude, and were crafted as

quickly as possible out of whatever materials were available. Four primary types of temporary shelters can be recognized: dugouts, cabins, wigwams, and cottages. Dugouts were the most primitive, just holes in the ground with vertical stakes supporting simple roofs. Cabins were not the sturdy log cabins that we typically think of, but rather wooden stakes driven into the ground, with wattle and daub infill and a thatched roof. Wigwams were structures used by the Native Americans and consisted of bent poles covered in woven mats or animal skins, and English settlers who used these also added chimneys and hinged doors. Cottages were more permanent but still crude, with timber frames covered by large boards or smaller clapboards and filled in with wattle and daub.

As the first years passed, many of these temporary dwellings had begun to be replaced by permanent structures, which were primarily timber framed. These structures became part of the Colonial style, which lasted from the mid 1600s until about 1700. Construction and style reflected the mother countries, though they could be called medieval in origin, following the late Gothic styles in Western Europe. At this time, Europe had already moved into the Renaissance styles of architecture, but those in the colonies “not only lacked the time, the skill, the architectural knowledge, the materials, and the money to duplicate the great Renaissance mansions of the aristocracy; they lacked even the desire to do so. It took nearly a century to evolve the economic means, the building skills, and the social ambitions for an aristocratic architecture, and when these arrived, the Georgian style was born” (Morrison 6). Therefore, the Colonial style favored

simplicity and practicality, with very little ornament. It was the expression of a pioneer society.

Many Colonial style houses from New England have been well preserved, providing a great reference of knowledge on American architecture of that period. House plans varied, based on family needs, availability of materials, and site, but three types were common. The one-room plan was the simplest, with a small entry vestibule leading to a main room used for living dining and cooking. Next to the large chimney were the stairs to the upper level, a single room devoted to sleeping. The two-room plan was similar to the one-room, but had a parlor on the opposite side of the chimney with a second fireplace. The parlor was the best kept room in the house, for it served as a place to receive important guests and conduct ceremonial functions. Therefore, the best furniture was kept here as well. The upstairs had two sleeping rooms instead of one. The added lean-to plan was an evolution of the two-room plan. An addition was made to the back of the house, with its rafters leaning against the top wall of the main house. This extra space was typically used for a kitchen, pantry, and another sleeping room.

Framing was typically done using hand-hewn heavy timbers, primarily oak in New England. Dutch Colonial homes were often built using brick and fieldstones, in addition to timber construction. Most joints were some variety of a mortise and tenon system secured in place with wooden pins. Like with Japanese construction, this required great skill, and craftsmanship was of high quality. Framing for the house began at the foundation, where a wooden sill rested on the foundation walls, made from fieldstones and clay mortar. Cellars

were widely built, mainly for the storage of vegetables and bulk items. Vertical posts supported horizontal beams, which in turn supported joists that held up each floor. At the roof, ridge beams were rarely used; instead, rafters met at lap joints, and were connected with purlins. Studs were placed between main posts, adding extra support for wall infill. Based upon material availability and construction preference, infill was usually of three types: wattle and daub, fired or unfired clay bricks called nogging, or a mixture of clay and chopped straw known as cats. The exterior was then covered in either clapboards or less commonly, shingles. In Rhode Island, Connecticut, and the middle and southern colonies, oak was mainly used because of its durability. In Massachusetts, however, cedar was the most common, followed by pine.

The earliest roofs were thatched, but those were quickly abandoned in favor of wood shingles, which could withstand the elements better. Gabled and pitched roofs were the most common, with slight eaves and no gutters. Another distinct roof type was the gambrel, “long supposed to have been introduced to America by the Dutch, but it did not appear on Dutch houses until the eighteenth century, and since it was used long before that in both New England and Maryland, in these regions, at least, it may certainly be counted an English feature” (Morrison 37). It wasn’t until the Georgian Style that hip roofs and dormers saw much use.

In contrast to the openness and translucency of *shoin* and *fusuma* in traditional Japanese homes, exterior openings in colonial homes were usually small, and let in little daylight. Before glass was readily available in the colonies,

sliding shutters or oiled paper were used in window openings. Eventually, glass production went up, and houses started using it for small, rectangular windows. Diamond shaped panes set in lead bars were inspired by medieval English dwellings, and, to increase light, multiple windows were arranged horizontally, separated by wooden mullions. Most of these windows were inoperable, but a few swinging casements were usually installed to let in outside air. Doors tended to be quite solid, being two boards on exterior entries, and one board thick on interior passages. Wooden bars were set behind entry doors at night for security.

Once the English colonies in America were well established and providing profit, builders had access to better materials and funds, and a new wave of immigration brought new men with knowledge of architecture and building practices. The Georgian style, one of the styles of the Renaissance, had taken hold of England and made its way to the colonies. Like others of the Renaissance, it was based on the vocabulary of ancient Roman architecture. Many of the methods and materials seen in the Colonial period were still used, but improvements of quality and quantity were made. Another material, brick, became very common and popular, as its manufacture had been improved and distributed almost everywhere. Lime-based plaster and paint became common as well.

Georgian house plans in the colonies evolved from the Colonial style to accommodate greater affluence. According to Hugh Morrison,

Georgian house plans reveal the greater wealth of the period by the larger number and greater size of the rooms, compared with those

of the seventeenth century. Plans were almost universally two rooms deep – a double file of rooms separated by a central hall running from front to back. The triple function of the old Colonial ‘hall’ was now divided into three specialized rooms: a kitchen, a separate dining room, and a ‘library’ or ‘sitting room’ or ‘drawing room’ serving as a family living room. The parlor was preserved as a formal room, unless perhaps its functions were served, in big houses, by a very large banquet hall or ball room. The kitchen, with servants’ rooms, in New England was placed in a separate ell at the back, with its own stairs, and in the South was housed in a separate building at some distance from the main house. Ceiling heights increased to an average of about 11 feet for the main floor and 9 for the chamber floor. (Morrison 296).

Rooms were rectangular; the use of curved rooms would not be seen until the Federal style following the Revolution.

The Georgian style was very formal; houses followed regular geometric shapes and were symmetrically balanced. Main doorways were a focal point of the exterior. They had elaborate paneling, and were bordered by classically inspired elements. Detailed pilasters framed each side of the doorway, and resting upon them was, most commonly, an angled pediment, though other overhead features were also used. Windows were rectangular, though some had segmented arches, and featured interior shutters. Unlike casement windows, Georgian windows were of the sliding-sash variety, operated with pulleys and

counterweights. Hip roofs replaced the gable as being most popular, and dormer windows projected from the roof slope, no matter the type. Exterior surfaces emphasized texture and horizontality, while interior surfaces were covered in paint or paneling and highly ornamented. Entry ways became more spacious, and more attention was given to the main stair. Furniture was made of fine materials, and was no less ornamented than any other interior treatment. It is clear that the Georgian style was all about displaying wealth and culture.

The Federal style appeared after the United States became a sovereign nation. Considered to be one of the finest American styles, it was bound in similar principles to the Georgian style, but several unique and distinct features set it apart:

the giant portico; the almost universal 'Federal doorway,' with its narrow flanking sidelights and an embracing elliptical fanlight; the projecting curved or polygonal bay on an exterior wall; the balustrade or parapet paced over the eaves rather than higher up the roof; the graceful spiral stairway of the front hall; and most of all the fragile and attenuated but very rich ornament executed in carved wood or molded plaster, inspired by the Brothers Adam, who in turn had learned from the decorated walls and ceilings of Pompeii and Herculaneum. (Morrison 574-5).

One of the great architects of the Federal period, Thomas Jefferson, drew inspiration from Palladio, and frequently used octagonal and elliptical forms in his plans. His home of Monticello is one of the most recognized of the Federal style.

Commodore Perry's Opening of Japan

On July 8, 1853, a fateful event occurred that would have a lasting impact on both Japan and the United States. On this day, a fleet of “black ships” was seen sailing towards the Bay of Tokyo. The vessels were steam ships, part of a fleet led by American Commodore Matthew Perry aboard his flagship, the *Susquehanna*. He had been sent by President Millard Fillmore with a letter for Japan's Emperor regarding the opening of Japanese ports to foreign ships. At this point, Japan was an isolated nation that deeply mistrusted foreigners, stemming from incidents with Portuguese missionaries and traders two hundred years prior. Convinced that the spread of Christianity in Japan was a ploy to usurp the ruling powers, the Japanese massacred thousands of native Christians, and in 1640, beheaded 48 Portuguese visitors with the following message, as described by Arthur Walworth: “So long as the sun warms the earth, any Christian bold enough to come to Japan...even if he be the god of the Christians, shall pay for it with his head.’ By having any dealings with foreigners, even by receiving letters from them, Japanese became liable to severe punishment and exposed their whole family circle to penalties. Moreover, the anti-foreign laws were made effective by high rewards for the detection of offenders” (Walworth 5). The Dutch, whom had aided Japan in expelling the Portuguese, were the only foreigners allowed to trade, and this was done on a small island under heavy security and humiliating circumstances. In 1825, an

official decree declared that any foreign vessels, except Dutch or Chinese, would be fired upon if they came in range of the coastal batteries.

In the early nineteenth century, some Americans, in the spirit of Manifest Destiny, wanted to challenge Japan's views on foreign policy. "Since the American nation had not existed at the time of the expulsion of the Portuguese, there was a feeling among Americans that they should not be held accountable for the misdeeds of Europeans and should not be put in the same category by the Japanese. There was even a naïve faith that the Japanese would make this distinction" (Walworth 8). Several missions were organized to express American goodwill and interest in relations with Japan. In 1837, C.W. King and the *Morrison* attempted to return seven lost Japanese sailors in an effort to show good intentions. According to Japanese law, however, natives were forbidden to leave the country or build boats that could travel long distances. Therefore, sailors returned by foreigners were regarded with great suspicion. The *Morrison* was subsequently fired upon, but managed to escape with little damage. Dissent by some Japanese who thought the Americans should not be driven away for their kind effort was harshly oppressed. This incident showed some of the social pressure behind the strict rule of the Shogunate, who were the real power behind the Emperor. Growing dissent would eventually erupt into revolution in 1868.

President Fillmore approved an expedition to force the Japanese into negotiation, and in May of 1853, a rehearsal of procedures was conducted on the Ryukyu Islands just south of the Japanese mainland. Here Commodore Perry skillfully and successfully navigated the diplomatic issues he would have to face

with the actual Japanese government. Perry was a very disciplined man, and his duty was placed above all else. His tasks were to protect his fleet as well as succeed diplomatically where others had failed. He was determined not to repeat the mistakes made by Commodore Biddle in an earlier attempt, where the Japanese controlled all aspects of the negotiation.

Upon entering Tokyo Bay, Perry's fleet was beset by many small vessels. A few tried to board the steam ships, but per Perry's orders, none were allowed aboard. Onlookers from the shore were mystified and afraid, for they had never seen strange ships like these before. After standing their ground, the Americans were able to convince the Japanese to send someone of political rank, the Vice-Governor of Uraga and his Dutch-speaking interpreter, to conduct discussion with one of Perry's aides. Anyone less would have belittled Perry's position in any negotiations. "These were the first Japanese officials ever to be received on American ground and on American terms. Relations were now definitely established on a basis of equality and on a level of diplomacy. For the moment, at least, fighting had been avoided" (Walworth 76). To remain on equal diplomatic footing, Perry refused pleas for discussion to be held in Nagasaki, where business was conducted with the Dutch. He made sure to pay strict attention to forms of speech, relaying the President of the United States in the same terms as the Japanese Emperor, putting them both on the same level of importance.

To prevent stalling, Perry threatened to approach Tokyo. This got the desired effect, as the Japanese weren't equipped to deal with the American

ships. Had it come to a battle, Tokyo's defenses would have collapsed rapidly, showing the weaknesses of the Tokugawa Shogunate behind the façade of a strong military force. To avoid further intrusion into the bay, the Vice-Governor, Kayama Yezaemon, was given authority to allow an official bearing consent from the Emperor to receive the President's letter on shore. The meeting took place in Kurihama Bay, and the Americans were met with overt pageantry. The Americans came ashore with their own pomp and circumstance:

No time now for qualms or regrets. Under the Commodore's broad pennant, at a dignified distance behind the escort, the barge moved toward the shore. It came alongside the small jetty made of rice-straw and sand. "Present arms!" The oarsmen held their sweeps erect. A staunch figure rose—gold braid and buttons gleaming—and majestically stepped ashore. For five days the audience had been curious to see this all powerful foreign lord. The band burst into *Hail, Columbia!* Without firing a shot, Perry had breached the age-old wall of Japan. (Walworth 95-96)

There was some deceit involved, however, by both sides. The officials Perry had been met by actually didn't hold the titles they had been presented as. Kayama Yezaemon, the "Governor" of Uraga, was actually a police officer, while the real governor posed as the "Prince of Idzu." The official correspondence from the Emperor was actually from the Shogun, though Perry had no way of knowing that the Shogun handled state affairs and used the Emperor's seal. The Japanese deception was enacted to prevent actual high-ranking officials from having the

displeasure of interacting with foreign “barbarians.” The Americans weren’t free from fault either. Throughout the whole process, Commodore Perry had been presented as Admiral Perry, for that title garnered more respect from the Japanese. The officials accepted the President’s letter, and Perry declared his intention to return the following spring for the Emperor’s reply. The Americans had been the first to hold open negotiations on Japanese soil in over two hundred years.

On February 11, 1854, Perry returned to Japan with another American fleet. Initial negotiations dragged on regarding the place of meeting, as Perry would accept nothing more than further up the bay. Finally, a meeting place just north of Yokohama was arranged. Once again, the main envoy to the Americans was Kayama Yeazaemon, though he had different interpreter who spoke English, Moriyama Yenosuke. It had been decided that the requests made by Fillmore’s letter would be fulfilled, and negotiation was to take place regarding the terms. On March 31, 1854, the final draft of the Treaty of Kanagawa was agreed upon. According to Peter Booth Wiley:

The treaty was an accord of peace and friendship. Shimoda was opened for the purchase of supplies as of the signing of the treaty. Hakodate was to be opened a year after the signing. No other ports were to be entered except by ships in distress. Shipwrecked sailors were not to be confined in Japan and were to be taken to either of the ports for repatriation. Supplies were to be procured only through the agency of Japanese officials. An American consul could be

appointed to reside at Shimoda within eighteen months after the signing of the treaty. Finally, a most favored nation clause, providing that any rights granted to other nations would be granted to the United States, was added at Williams's suggestion. (Wiley 420).

The treaty passed through the hands of Congress and the President and was ratified on June 22, 1855.

As word of Perry's success became known, an influx of other Western nations seeking similar relations with Japan soon followed. In 1858, a treaty of commerce was signed between Japan and the U.S. that served as a reference for relations until Japan attacked Pearl Harbor in 1941. Perry's dealings also brought to Japan a desire to learn all they could about Western industry and technology. Rapid modernization was soon to follow, and when the Mikado took power from the Tokugawa Shogunate in 1868, military and industrial leaders rose to the top of the Imperial hierarchy. They were confident that the new technology from the West would enable Japan to expand its tradition beyond its shores. Thus the use of Western methods without the concept of Western liberty grew until the outbreak of World War II.

Japanese Architecture: Meiji Period

With the ousting of the Tokugawa Shogunate and the restoration of Imperial rule, the Emperor had the task of reforming both domestic and foreign policy. Internationally, Japan opened up relations with Western nations.

Domestically, a parliament was instituted, the capital was moved from Kyoto to Edo, renamed Tokyo, and reorganization of social classes from the feudal era was enacted. A new era that lasted until 1912, Meiji, was proclaimed, and Japan began the process of modernization and industrialization. As times began to change, the material world started to change as well:

In response to changes in politics, industrialization, and diplomacy, the realm of material culture grew increasingly at odds with the stereotype of an eternal Japan. This is not to deny that traditional lifestyles persisted to a great extent, notably outside the capital and major towns. Indeed, even in the cities all but the upper classes remained at the beginning virtually unaffected in their daily lives by the implementation of the new political order. Yet, all the same, and within a relatively short period of time, an altered environment began to take shape. Naturally, as is still the case today, architecture, as well as food, manners, and dress, played a vital and accepted role in this process. (Stewart 15)

Meiji architecture took much of its inspiration from European sources. Elements of styles like Neoclassical, Italianate, and Victorian Gothic were apparent, though were not always accurate in the execution of these styles. More interesting is the use of purely Japanese techniques and ideas to mimic European styles. *Giyofu* were wooden structure built by master carpenters, with the unique feature of carving exteriors to mimic masonry. Coloration was very important to replicate other materials. They incorporated Japanese tiled roofs and carvings inspired by

shrines. Interestingly, Chinese-inspired ornamentation usually found its way onto these buildings as well. Stylized clouds and dragons adorned doorways, in an odd mix of East meets West.

Tokyo quickly became a haphazard mosaic of conflicting building styles and types. Colleges, banks, and schools of Western design arose as well as government ministries, museums, and rail stations. Part of this was due to a lack of professionally trained architecture and engineering students. Even when the first technical colleges started, the professors were barely older than the students, and a multitude of stylistic elements were employed. Another factor was the employment of European architects of various nationalities, who brought with them varying experience and preference. Many of the traditional Japanese principles of architecture were thrown aside in favor of Western replication.

Frank Lloyd Wright

During the Meiji era, an American architect named Frank Lloyd Wright was beginning to develop his ideas of architecture. He was clearly interested in the traditional style of Japan and was familiar with its domestic architecture even before his first visit to Japan in 1905. He was likely familiar with Edward Morse's book, *Japanese Homes and Their Surroundings*, and many of his observations about Japanese architecture bore similarities to Morse's own. At the 1893 World's Fair in Chicago, Wright visited the Japanese pavilion, quite modest and removed in comparison to the imposing neoclassical style of all the fair buildings. Here he saw firsthand the principles and quality of Japanese art and architecture.

On his first visit to Japan he documented various temple complexes and gardens, as well as collected many examples of art. He became increasingly interested in the articulation of space, as well as architecture's connection to nature:

In its approach to space as an unlimited medium, however, Wright's work does appear to have shared something in common with traditional Japanese architecture, which, like his own 'organic' form, grows outward in rectangular intervals in a theoretically infinitely extendible articulation of space. Indeed, in their additive nature Wright's work and traditional Japanese buildings were both in marked contrast to the more typical Western approach of enclosing and subdividing space. Moreover, in their treatment of the boundary between interior and exterior as an indefinite permeable *zone*, rather than a rigid line, they would seem to have shared at least one important spatial characteristic in common. (Nute 124)

Unlike the replication of Western styles in Japan, Wright acknowledged principles of Japanese space and form, but interpreted them in his own unique vernacular.

Frank Lloyd Wright's 1923 Imperial Hotel in Tokyo is a strange mix of Wright's earlier American works and his image of what Japanese architecture represented. The forms weren't overtly Japanese, but the layout of rectangular space and geometric ornamentation reminiscent of Japanese prints and woodcuts makes it seem like it belongs. However, its hotel function of Western

import isn't very conducive to the intimate flow of space and connection with nature.

The design of the Imperial Hotel is proof of this state of affairs, in terms of which Wright hoped, as he always did, to rehabilitate and redefine architectural Truth. Whence came the aesthetic perfection, and perfectionism, inherent in the hotel scheme: the same precision of proportion or spatial sequence that rarely failed Wright even in his earliest works. Yet the 'grand hotel' building type itself, and probably the budget, which Wright apparently imagined unlimited, were his undoing. These factors led to a blurring of what he wished to state, as much as an overlay of neoclassicism would have done.

This detracted from the whole idea and its realization. (Stewart 81)

It was conceived as a new amalgamation of East and West, but is more conducive to his personal style than a true blend of Japanese tradition and modern practices.

Japanese Architecture: Meiji to World War II

In the 1920s, Japan was emerging as a "full-scale urban mass industrial society" (Stewart 90). Tokyo was still growing, and as it had in the Meiji era, focused on practical and functional urban development over beauty and aesthetics. The first inklings of modernism began to appear, reflecting Japan's continued obsession with technological innovation. Inspiration and ideas from Germany's Expressionist movement appeared in public works, though it wasn't

until 1923 when these ideas were taken to a residential application. This trend led to the use of the International style throughout the 1930s.

The impact of the Great Depression on Japan's economy led it to invade Manchuria to maintain its supply of food and resources, for the Japanese mainland could no longer support itself. Its image was diminished in the Western powers by claims of brutality in its war with China, and it was seen as an unequal power to the West. The Imperial Crown style rejected avant-garde movements in Europe and became recognized with Japanese nationalism and expansionism, though it followed a more monarchical ideology, like Victorian or Edwardian, than emerging Fascist architecture. A defining feature of this style was a more traditional looking Japanese roof system. Imperial Crown architecture was abandoned after the defeat of Japan's military regime.

Unlike the Nazis in Germany, Japan's regime did not cut short the move towards Modern architecture. Alongside the Imperial Crown style, the International style and its ideas of rationalism became a dominant theme during the 1930s. Functionality and the employment of technology in building methods fueled the construction of many International examples. Residences blended Japanese customs with Western conventions, though the traditional reliance on extended family was being replaced by a preference for homes of the nuclear family.

Kenzo Tange and Modernism

Out of the humiliation of defeat in World War II came a new and important era in Japanese architecture. Traditional qualities of Japan were rediscovered through Modernism:

A decade after the war in the Pacific ended, the Western world gradually began to realize that many important qualities of its accepted modern architecture were in fact very old. These qualities had existed for centuries in many Japanese buildings. Japanese tradition contained not only the simplicity, lightness, and openness which contemporary Western designers had recently been advocating, not only the modulated repetition of elements so familiar in contemporary Western building, but it often demonstrated the same aesthetic values as well. It relied on the use of ingenious construction and untreated natural materials to build a sort of refined extension of nature: a concentration of nature's own kind of beauty. (Boyd 9)

The Peace Museum at Hiroshima, designed by Kenzo Tange, commemorates the lives lost to the atomic bomb. The building is long, narrow, and elevated twenty feet above the ground on concrete pillars. The building is meant to serve its function as an exhibition without drawing attention to itself. He also designed the Memorial to the Dead, which has a shape like a saddle, loosely based on the traditional roof form of an ancient *haniwa* house. The museum happened to be Tange's first building.

Greatly versed in the Japanese traditions and forms, Tange expressed them primarily through his method, and not necessarily the result. He was appalled by the mess of Western imitations littering Tokyo in the Meiji era, and was committed to contribute to a “more genuine popular culture expressing some of the realities of their regional way of living” (Boyd 17). In his method, he followed six primary rules: simplicity of plan and form, typification, strength, a ban on ornament, honesty to the materials, and the avoidance of the attitude of *furyu* or “kidding yourself.” He believed that beauty was very personal and secret to the Japanese.

Considered by many of Tange’s admirers to be his best building, the Office and Assembly Buildings for the Kagawa Prefectural Government at Takamatsu are great examples of his third phase of works, “the trabeated or beam-glorifying phase” (Boyd 32). The island administration block, perhaps his most controversial building, is composed of reinforced concrete beams that resemble timber. This effect is achieved not only through the grain of the wooden forms, but also the appearance of carpentry techniques at the joints. They also have the dimensional appearance of planks. The sheer number of beams reflects the method used to erect the formwork.

Tange, in addition to his buildings, showed an interest in city planning and Utopian ideals. Town planning was a foreign concept, with buildings placed where there was space. In 1961, Tange’s design team published “A Plan for Tokyo, 1960—Toward a Structural Reorganization.” The idea was to break the center of the city into a linear array of linked hubs to break the congestion that

plagued the city. Expansion was set over Tokyo Bay, which was an expensive prospect, but cut back on the need for extra land. Connected by elevated highways, office and recreations would be along the spine, with housing extending from the sides. Of course, this design, like other Utopian projects before it, didn't gain the approval of planning authorities. Tange showed the world at large that Japan was capable of creating works of architecture that stood on their own instead of copying Western styles.

Architecture of present day Japan has been influenced by the second wave of modernization in the postwar period. Modern Japanese architecture evolved from Tokyo, which was rebuilt after World War II. Western concepts, invariably still hold sway, for they are now as much a part of Japan as its ancient traditions, but they are not a confinement:

Nowadays Japan borrows selectively from the West, usually hiring overseas architects for a particular expertise, such as skyscraper design or the planning of such healthcare facilities as nursing homes, which are new to Japan but have existed overseas for some time. Otherwise, fresh crops of home-grown designers have been turning the country into an incubator for innovation and invention that is envied and closely watched by the worldwide architectural community. (Littlefield, Pollock, and Sumner 27)

Contemporary architects in Japan are learning to work within the chaos of the city and globalization, but are also being inspired by history. It is amazing that the country holds some of the most modern buildings in the world, as well as some of

the most ancient, but they are strung together with a shared culture that has survived the passage of the centuries.

The influence of Western culture brought by the Americans with Commodore Perry's expedition has transformed Japan from an isolated nation to one of the most modern places on Earth. It has not been an easy process, and both nations have been irreversibly affected by the consequences, both good and bad. Japan has managed to reconcile Western thought with its time honored traditions, and its architecture has proven that both can coexist. As globalization takes hold, Japan is probably the nation best suited to adapt, for it has done so many times in the span of just a century and a half.

Works Cited

- Alex, William. *Japanese Architecture*. New York: George Braziller, 1963.
- Boyd, Robin. *Kenzo Tange*. New York: George Braziller, 1962.
- Morrison, Hugh. *Early American Architecture: From the First Colonial Settlements to the National Period*. New York: Oxford University Press, 1952.
- Morse, Edward S. *Japanese Homes and Their Surroundings*. New York: Dover Publications, Inc., 1961.
- Nute, Kevin. *Frank Lloyd Wright and Japan: The Role of Traditional Japanese Art and Architecture in the work of Frank Lloyd Wright*. New York: Van Nostrand Reinhold, 1993.
- Paine, Robert Treat, and Alexander Soper. *The Art and Architecture of Japan*. 3rd ed. New York: Penguin Books, 1981.
- Stewart, David B. *The Making of a Modern Japanese Architecture: 1868 to the Present*. Tokyo: Kodansha International, 1987.
- Sumner, Yuki, Naomi Pollock, and David Littlefield. *New Architecture in Japan*. London: Merrell Publishers Ltd., 2010.
- Walworth, Arthur. *Black Ships Off Japan: The Story of Commodore Perry's Expedition*. New York: Alfred A Knopf, 1946
- Wiley, Peter Booth, and Korogi Ichiro. *Yankees in the Land of the Gods: Commodore Perry and the Opening of Japan*. New York: Viking, 1990.